TABLE 7. AGE AT FIRST EPISODE OF AOM IN RELATION TO NUMBER OF EPISODES OF AOM PER CHILD

No. of Episodes per Child	Age at First Episode							
	< 1 yr		1 yr		> 2 yr		Total	
	No.	%	No.	%	No.	%	No.	%
1	295	28	407	41	650	69.0	1,352	45
2-3	430	41	411	42	257	27.5	1,098	37
4-5	200	19	128	13	30	3.0	358	12
6-16	130	12	35	4	5	0.5	170	6
Total	1,055	100	981	100	942	100.0	2,978	100

AOM — acute otitis media.

among children born in 1977 and living in different districts and different types of houses in the city of Malmö was studied in three different districts (center of the city, Rosengård, and Oxie). In the center of the city most families live in older, mainly well-maintained apartment houses. Rosengård is a modern crowded tenement house district built in the 1960s and 1970s. Oxie is a modern crowded villa suburb outside Malmö built in the later 1970s. The children living in Oxie had the highest cumulative incidence rate. At the end of the observation period of 5 years, about 65% of the children had had at least one episode of acute otitis media with effusion. The corresponding figures for the children living in Rosengård and in the center of the city were about 55% and 45%, respectively. The differences among the districts were significant ($p < .001$).

In order to study the importance of day-care type and the importance of age at first episode to the total number of episodes per child, 2,978 children were followed during their first 4 years of life. The children were born from 1977 to 1979 and had been registered for at least one episode of acute otitis media. Among children attending public day-care centers for the first time before the age of 2 years, 8% were registered for six or more episodes of acute otitis media during their first 4 years of life. In children attending public day-care centers for the first time between the ages of 2 and 3 years, 5% had six or more episodes of acute otitis media during the corresponding time. For children cared for at home or privately during their first 4 years of life, 3% were registered for six or more episodes of acute otitis media. The difference between the groups was statistically significant ($p < .001$).

Table 7 shows the age at the first episode of acute otitis media in relation to the total number of episodes per child during the first 4 years of life. Forty-five percent of the children had only one episode, while 6% were registered for six or more episodes. Among 1,055 children having their first episode of acute otitis media before the age of 1 year, 12% were registered for six or more episodes. The corresponding figure among 942 children having their first episode after the age of 2 years was 0.5%. The difference between the groups was significant ($p < .001$).

The study of the medical records of 504 children from the otolaryngology and pediatric departments showed that the otitis-prone children were registered for a mean number of 39 ambulatory visits per child during their first 4 years of life, as compared to 9 visits per child in the control group.

In the otitis-prone group myringotomy was performed at least once in 67% of the children. Fifty-two percent had tympanostomy tubes inserted and 19% had undergone adenoidectomy. The corresponding figures from the control group were myringotomy, 13%; tympanostomy tubes, 6%; and adenoidectomy, 6%.

The occurrence of other diseases diagnosed in the children showed that in the otitis-prone group, 53% had been found to have bronchopulmonary diseases at least once, 44% had been treated for gastrointestinal diseases, and 36% had been found to have allergic symptoms or diseases at least once. The corresponding figures for the control group were bronchopulmonary diseases, 32%; gastrointestinal diseases, 33%; and allergic symptoms or diseases, 17%. The difference between the two groups was statistically significant ($p < .001$).

CONCLUSIONS

The incidence rate of acute otitis media was highest in 1-year-old boys. At the age of 3 years, about 50% of all children in Malmö had had at least one diagnosed episode of acute otitis media. At the age of 7 years, the corresponding figures were 65% to 70%.

The incidence of acute otitis media was found to vary among children living in different districts and in different types of housing in the city. Children attending public day-care centers early in life were more prone to recurrent episodes of acute otitis media than those attending public day-care at later ages, or those children cared for at home or in private care.

Children having their first episode of acute otitis media before the age of 1 year run a greater risk of being otitis-prone than those having their first episode after the age of 1 year. Children with recurrent episodes of acute otitis media early in life also seem to be more prone than other children to other kinds of diseases, ie, bronchopulmonary, gastrointestinal, and allergic diseases.

It is important to detect and recognize otitis-prone children as early as possible in order to be able to offer them treatment and long-range control.

ESTIMATING THE RISK OF ACUTE OTITIS MEDIA AMONG URBAN CHILDREN

JUHANI PUKANDER, MD; MARKKU SIPILÄ, MD; MATTI KATAJA, PHD; PEKKA KARMA, MD

Acute otitis media is an increasingly important health problem among the pediatric population. Only a few children escape acute otitis media during their childhood days.[47] Many factors may affect the liability of a small child to contract acute otitis media. These factors are undergoing continuous change along with changes in the way of living and behavior of the entire society. One of the most prevalent changes is the arrangement of day-care for children, because increasingly both parents are working outside the home.[48]

NOTICE
This material may be protected by copyright law (Title 17 U.S. Code).

2024228228

Source: https://www.industrydocuments.ucsf.edu/docs/psvj0000